# ULTRA UV

**Cataloge no.: DR-TOC-UV**

LIGHTWATER
ultrapure

**Technical specification:**

- System intended to be fed by purified water of II or III purity class, according to ISO 3696:1999, ASTM, CLSI.
- Water purification levels:
  - demineralization on an spectrally clean ion-exchange TOC bed,
  - UV lamp 185/254 nm,
  - microfiltration capsule 0,45/0,2µm.
- Automatic and unattended system operation.
- System equipped with a recirculation pump.
- Mobile intake point of water – first purity class according to ISO 3696:1999,EP equipped with a microfiltration capsule 0,2um.
- Recurring, automatic purified water recirculation between water intakes.
- User-performed maintenance procedures (easy disposables replacement).
- Intended to be fed by cold water: 5-40°C.
- Optional user-performed device installation.
- Power supply: 220-240V/50Hz.

**Dimensions:** 235x470x570 mm

**Functions monitoring the device:**

- The device is equipped with a 24V automatics with a microprocessor control and measurement system, that includes:
  - color display screen with a Touch Panel,
  - conductometer measuring conductivity and temperature of purified water (measured in µS/cm or MOhm),
  - clock displaying date and time,
  - information about current system status,
  - alarm informing about necessity to replace ionex resins,
  - alarm informing about necessity to replace UV lamp,
  - alarm informing about necessity to replace microfiltration capsule,
  - graphic and sound alarm signal,
  - maintenance dates preview,
  - menu in English, Russian, Spain or Croatian language,
  - built-in RS 232 connection to personal computers allowing to adjust maintenance frequency and alarm levels,
  - built-in USB connection to personal computers allowing to adjust maintenance frequency and alarm levels.
- Software.
- Built-in manometer measuring feed water pressure.

**Functions protecting the device:**

- Pump shutdown when:
  - the feed water pressure is too low (lack of feed water) - low pressure sensor,
  - the tank is full - high pressure sensor.
- Thermal protection of the RO module, automated system shutdown when the feed water temperature is below 4˚C or above 40˚C.
- Can be automatically shut down when any alarm occurs.
- System autostart.
- Notification/alarm preview.

**Required connections:**

- Pressure min. 2 bar.
- 230V socket.
- Purified water fits the ISO 3696: 1999, EP the ASTM, and the CLSI standards for the first purity class.
- Obtained water is microbiologically and physicochemically compliant with the FP standard for the purified production water.
- Obtained water may be used for: instrumental analyses AAS, ICP/MS, IC, HPLC, GC, bacteria cultures, biochemical analyses.

**Purified water parameters:**

- bacteria < 1 cfu/ml,
- particles > 0.2µm < 1/ml,
- conductivity < 0,055 mS/cm,
- resistance 18,2 MOhm*cm.

| Model | Microfiltration MF 0,2µm | Module H7 TOC | UV lamp radiator 185/254 nm |
|---|---|---|---|
| ULTRA UV | + | + | + |
| Lifetime | 12 months | 2000 $dm^3$* | 12 months** |
| **Cataloge no.** | **EM-SP-20** | **EJ-2000-1** | **EUV-185-254-HLP** |

*If feed water parameters are different (hard water) the shell live of the spare parts might be shorter!
**Liftime 12 months or 8500 hour